

### **LISTING OF THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 through 67. (Cancelled)

Claim 68. (Previously Presented) A method of inhibiting epileptogenesis, comprising administering to a subject in need thereof an effective amount of a substituted  $\beta$ -amino anionic compound, comprising an amino group, an anionic group, and a two-carbon spacer unit, wherein

said anionic group is a carboxylate; and

said amino group is  $-NR^aR^b$ , wherein  $R^a$  and  $R^b$  are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl; or  $R^a$  and  $R^b$ , taken together with the nitrogen to which they are attached, form an unsubstituted or substituted heterocycle having from 3 to 7 atoms in the heterocyclic ring, wherein said amino group and said anionic group are separated by said two-carbon spacer unit;

wherein said two-carbon spacer unit may be substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxy carbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxy, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, azido, heterocyclyl, aromatic, and heteroaromatic moieties;

or a pharmaceutically acceptable salt or ester thereof, such that epileptogenesis is inhibited.

Claims 69 through 137. (Cancelled)

Claim 138. (Previously Presented) A method for treating a convulsive disorder, comprising administering to a subject in need thereof an effective amount of a substituted

$\beta$ -amino anionic compound, comprising an amino group, an anionic group, and a two-carbon spacer unit, wherein

said anionic group is a carboxylate; and

said amino group is  $-NR^aR^b$ , wherein  $R^a$  and  $R^b$  are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl; or  $R^a$  and  $R^b$ , taken together with the nitrogen to which they are attached, form an unsubstituted or substituted heterocycle having from 3 to 7 atoms in the heterocyclic ring, wherein said amino group and said anionic group are separated by said two-carbon spacer unit;

wherein said two-carbon spacer unit may be substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxy carbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxy, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, azido, heterocyclyl, aromatic, and heteroaromatic moieties;

or a pharmaceutically acceptable salt or ester thereof, such that said convulsive disorder is treated.

Claims 139 through 141. (Cancelled)

Claim 142. (Previously Presented) A method for treating a convulsive disorder, comprising administering to a subject in need thereof an effective amount of a substituted  $\beta$ -amino anionic compound, comprising an amino group, an anionic group, and a two-carbon spacer unit, wherein

said anionic group is a carboxylate; and

said amino group is  $-NR^aR^b$ , wherein  $R^a$  and  $R^b$  are each independently hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxy carbonyl, or aryloxy carbonyl; or  $R^a$  and  $R^b$ , taken together with the nitrogen to which they are attached,

form an unsubstituted or substituted heterocycle having from 3 to 7 atoms in the heterocyclic ring, wherein said amino group and said anionic group are separated by said two-carbon spacer unit;

wherein said two-carbon spacer unit may be substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxy carbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxy, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, azido, heterocyclyl, aromatic, and heteroaromatic moieties;

or a pharmaceutically acceptable salt or ester thereof, such that epileptogenesis is inhibited.

143-144. (Cancelled)

Claim 145. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein  $R^a$  and  $R^b$  are each independently hydrogen, alkyl, alkylcarbonyl; or  $R^a$  and  $R^b$ , taken together with the nitrogen to which they are attached, form an unsubstituted or substituted heterocycle having from 3 to 7 atoms in the heterocyclic ring.

Claim 146. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with an amino substituent, wherein said amino substituent is an alkyl amino, dialkylamino, arylamino, diarylamino, or alkylaryl amino moiety.

Claim 147. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with an acylamino substituent, wherein said acylamino substituent is an alkylcarbonylamino, arylcarbonylamino, carbamoyl, or ureido moiety.

Claim 148. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of aromatic and alkoxy moieties; and

R<sup>a</sup> and R<sup>b</sup> are each independently hydrogen, alkyl, or alkylcarbonyl; or R<sup>a</sup> and R<sup>b</sup>, taken together with the nitrogen to which they are attached, form an unsubstituted or substituted heterocycle having from 3 to 7 atoms in the heterocyclic ring.

Claim 149. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of substituted aromatic moieties.

Claim 150. (Previously Presented) The method of claim 149, wherein said substituted aromatic or substituted aryloxy moiety is substituted with a substituent selected from the group consisting of halogens, hydroxyl, alkoxy, amino, alkylamino, dialkylamino, arylamino, alkylcarbonylamino, and aromatic moieties.

Claim 151. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, phosphonato, phosphinato, acylamino, amidino, imino, thiocarboxylate, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, heterocyclyl, aromatic, and heteroaromatic moieties.

Claim 152. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of carboxylate, alkylcarbonyl, alkoxy carbonyl, aminocarbonyl, alkylthiocarbonyl, heterocyclyl, aromatic, and heteroaromatic moieties.

Claim 153. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the

group consisting of carboxylate, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, and alkylthiocarbonyl moieties.

Claim 154. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha$ -substituted  $\beta$ -alanine.

Claim 155. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha,\alpha$ -disubstituted  $\beta$ -alanine.

Claim 156. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha,\beta$ -disubstituted  $\beta$ -alanine.

Claim 157. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is a  $\beta,\beta$ -disubstituted  $\beta$ -alanine.

Claim 158. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha,\beta,\alpha$ -trisubstituted  $\beta$ -alanine.

Claim 159. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha,\beta,\beta$ -trisubstituted  $\beta$ -alanine.

Claim 160. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is an  $\alpha,\alpha,\beta,\beta$ -tetrasubstituted  $\beta$ -alanine.

Claim 161. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is a  $\beta$ -substituted  $\beta$ -alanine.

Claim 162. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein the said  $\beta$ -substituted  $\beta$ -alanine is  $\beta$ -substituted with a substituent selected from the group consisting of heterocyclyl, aromatic, and heteroaromatic moieties.

Claim 163. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-fluorophenyl.

Claim 164. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-phenoxyphenyl.

Claim 165. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-(4-methylphenoxy)phenyl.

Claim 166. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-methyl-4-methoxyphenyl.

Claim 167. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-(3,4-dichlorophenoxy)phenyl.

Claim 168. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2-methylphenyl.

Claim 169. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-(4-chlorophenoxy)phenyl.

Claim 170. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2,5-dimethyl-4-methoxyphenyl.

Claim 171. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-trifluoromethoxyphenyl.

Claim 172. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2-chlorophenyl.

Claim 173. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2-fluoro-3-trifluoromethylphenyl.

Claim 174. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-bromo-4-methoxyphenyl.

Claim 175. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-bromophenyl.

Claim 176. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is phenyl.

Claim 177. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-methylphenyl.

Claim 178. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-chlorophenyl.

Claim 179. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-acetamidophenyl.

Claim 180. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2,5-dimethoxyphenyl.

Claim 181. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-diethylaminophenyl.

Claim 182. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-methylphenyl.

Claim 183. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 2-hydroxy-3-methoxyphenyl.

Claim 184. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 4-phenylphenyl.



Claim 185. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3,4-dibenzyloxyphenyl.

Claim 186. (Previously Presented) The method of any one of claims 68, 138, or 142, wherein said substituted  $\beta$ -amino anionic compound is  $\text{RCH}(\text{NH}_2)\text{CH}_2\text{COOH}$ , wherein R is 3-[ (3-trifluoromethyl)phenoxy] phenyl.

Claim 187. (Previously Presented) The method of inhibiting epileptogenesis of claim 68, wherein  $\text{R}^b$  is alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxy carbonyl.

Claim 188. (Previously Presented) The method of inhibiting epileptogenesis of claim 68, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxycarbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, azido, heterocyclyl, aromatic, and heteroaromatic moieties.

Claim 189. (Previously Presented) The method for treating a convulsive disorder of claim 138, wherein  $\text{R}^b$  is alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxy carbonyl.

Claim 190. (Previously Presented) The method for treating a convulsive disorder of claim 138, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxycarbonyloxy, aryloxy carbonyloxy, carboxylate, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate,

sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, azido, heterocyclyl, aromatic, and heteroaromatic moieties.

Claim 191. (Previously Presented) The method for treating a convulsive disorder of claim 142, wherein R<sup>b</sup> is alkyl, alkenyl, alkynyl, cycloalkyl, aryl, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, or aryloxycarbonyl.

Claim 192. (Previously Presented) The method for treating a convulsive disorder of claim 142, wherein said two-carbon spacer unit is substituted with a substituent selected from the group consisting of halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxycarbonyloxy, aryloxycarbonyloxy, carboxylate, alkylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, sulfonato, sulfamoyl, sulfonamido, nitro, azido, heterocyclyl, aromatic, and heteroaromatic moieties.